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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/434,196	11/04/99	REDDY	G A-64077-2/RF

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HM12/0326

FLEHR HOHBACH TEST  
ALBRITTON & HERBERT LLP  
SUITE 3400  
FOUR EMBARCADERO CENTER  
SAN FRANCISCO CA 94111-4187

EXAMINER

SANDALS, W

ART UNIT	PAPER NUMBER
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1636

DATE MAILED: 03/26/01

Handwritten number '6'.

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/434,196

Applicant(s)  
Reddy et al.

Examiner  
WILLIAM SANDALS

Group Art Unit  
1636



☒ Responsive to communication(s) filed on Nov 4, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-6, 14, and 16-28 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-6, 14, and 16-28 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Drawings*

1. The drawings as submitted on November 4, 1999, have been approved by the draftsman.

### *Specification*

2. The use of the trademarks AMPLITAQ, EXPAND HIGH FIDELITY and PROBOND have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

3. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.
4. Sequences appear at page 26, lines 26-28 which do not have sequence identifiers.

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Applicant must comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). Direct the reply to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the reply.

***Claim Objections***

5. Claims 2, 5, and 6 are objected to because of the following informalities: Claims 2, 5, and 6 contain language in the marked up copy which does not correspond to the original claim language being amended. Appropriate correction is required.
6. Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 27 is a duplicate of claim 3.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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8. Claim 20 (and all dependent claims 17, 21, 22 and 28) is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 20 recites "homology scanning" at lines 1, 7 and 8. This term is not described in the original claims or specification and as such constitutes new matter. Correction is required. For the purposes of examination, it is assumed that the term "homology scanning" has the same meaning as "binding activity" or "annealing activity" as recited in claims 16 and 17.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 3, 5, 6, 14 and 16-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the term "minimally complementary". No objective criterion is provided in the specification or claim to appraise one of skill in the art the meaning of "minimally complementary". There is no definition of "minimally complementary" in the claims or specification to appraise one of skill in the art with an unambiguous meaning of the claimed invention.

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11. Claims 14, 16 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: Step “b)” is recited to screen for “altered activity”. There is no recitation in the step which indicates what the “activity” is or how the previous combining step leads to any activity to be measured.
12. Claim 20 recites the term “homology scanning”. “Homology scanning” is not defined in the specification or claims. Without proper guidance as to the meaning of the term, one of ordinary skill in the art would not know the metes and bounds of the claim.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 2, 4, 5, 14, 16-19 and 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Shinohara et al.

Shinohara et al. taught (see especially the abstract, figures and the section entitled “Complexes involved in the formation and repair of DSBs”) a composition comprising a first single stranded nucleic acid, a second single stranded nucleic acid and a Rad52 protein (which may be a human Rad52 protein) from a higher eukaryote where the nucleic acids may be

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perfectly matched or partially matched. Also taught is a method for screening where the associative binding of Rad52 with another Rad protein or RPA may alter the binding of the Rad52 protein to nucleic acids.

15. Claims 1, 4, 5, 23 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Park.

Park taught (see especially the introduction) a composition comprising a first single stranded nucleic acid, a second single stranded nucleic acid and a human Rad52 protein from a higher eukaryote where the nucleic acids may be perfectly matched or partially matched.

### *Conclusion*

16. Certain papers related to this application are *welcomed* to be submitted to Art Unit 1636 by facsimile transmission. The FAX numbers are (703) 308-4242 and 305-3014. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6(d)). NOTE: If applicant *does* submit a paper by FAX, the original copy should be retained by the applicant or applicant's representative, and the FAX receipt from your FAX machine is proof of delivery. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office.

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Any inquiry concerning this communication or earlier communications should be directed to Dr. William Sandals whose telephone number is (703) 305-1982. The examiner normally can be reached Monday through Friday from 8:30 AM to 5:00 PM, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Schwartz can be reached at (703) 308-1133.

Any inquiry of a general nature or relating to the status of this application should be directed to the Zeta Adams, whose telephone number is (703) 305-3291.

William Sandals, Ph.D.

Examiner

March 21, 2001

  
TERRY MCKELVEY  
PRIMARY EXAMINER